§56.01-2 Incorporation by reference.

(a) Certain standards and specifications are incorporated by reference into this part with the approval of the Director of the Federal Register in accordance with 5 U.S.C. 552(a). To enforce any edition other than the one listed in paragraph (b) of this section, notice of the change must be published in the FEDERAL REGISTER and the material made available to the public. All approved material is on file at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC, and is available from the sources indicated in paragraph (b).

(b) The standards and specifications approved for incorporation by reference in this part, and the sections affected are:

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

11 West 42nd Street, New York, NY 10036 ANSI B1.1-82 Unified Inch Screw

Flanged Fittings, Class 25, 125, 250 and 800......56.60-1; 56.60-10 ANSI B16.3-85 Malleable Iron Thread-

ANSI B16.3-65 Malicable Fron Threaded Fittings, Classes 150 and 300......56.60-1 ANSI B16.4-85 Cast Iron Threaded Fittings, Classes 125 and 25056.60-1

ANSI B16.5-81 Pipe Flanges and Flanged Fittings ...56.25-20; 56.30-10; 56.60-

ANSI B16.9-86 Factory-Made Wrought Steel Buttwelding Fittings......56.60-1

ANSI B16.10-86 Face-to-Face and Endto-End Dimensions of Ferrous Valves......56.60

ANSI B16.14-83 Ferrous Pipe Plugs, Bushings, and Locknuts with Pipe Threads......56.60-1

ANSI B16.18-84 Cast Copper Alloy Solder Joint Pressure Fittings56.60-1 ANSI B16.20-73 Ring-Joint Gaskets

and Grooves for Steel Pipe Flantion VIII, Division 1, Pressure Vessels, 1986 with addenda ...56.15-1; 56.15-5; 56.15-10; 56.25-5; 56.30-10; 56.30-30; 56.60-15: 56.60-1: 56.95-10

Section IX, Welding and Brazing

Wrought Copper Alloy Solder
Joint Drainage Fittings—DWV......56.60-1
ANSI B16.34-88 Valves-Flanged,
Threaded and Welding End...56.20-1; 56.60-

ANSI B16.42-87 Ductile Iron Pipe Flanges and Flanged Fittings, Classes 150 and 30056.60-1

ANSI B31.1-86 Power Piping56.01-5 ANSI B36.10M-85 Welded and Seamless Wrought Steel Pipe56.07-5; 56.30-20;

ANSI B36.19M-85 Stainless Steel Pipe56.07-5; 56.60-1

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME) INTERNATIONAL

Three Park Avenue, New York, NY 10016-5990

Boiler and Pressure Vessel Code:

Section I, Power Boilers, 1986 with addenda56.15–5; 56.15–10; 56.60–1; 56.60–1; 56.60–1; 56.60–1; 56.95–10 56.15–1 Section VIII, Division 1, Pressure Vessels, 1986 with addenda ...56.15–1; 56.15–5; 56.15–10; 56.25–5; 56.30–10; 56.30–30; 56.60–15; 56.60–1; 56.95–10

Section IX, Welding and Brazing Qualifications, 1986 with addenda56.70-5; 56.70-20; 56.75-20; 56.85-10

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM A 36/A 36M-97a, Standard Specification for Carbon Structural Steel56.30-10

ASTM A 47-90 (1995), Standard Specification for Ferritic Malleable Iron
Castings......56.60-1

ASTM A 53-98, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless......56.10-5; 56.60-1

ASTM A 106-95, Standard Specification for Seamless Carbon Steel
Pipe for High-Temperature Service
......56.60-1

46 CFR Ch. I (10-1-03 Edition)

§ 56.01–2 ASTM A 126-95, Standard Specification for Gray Iron Castings for Volume Florida Formation (Castings for Volume Florida Formation)

tion for Gray Iron Castings fo Valves, Flanges, and Pipe Fitting	
······································	
ASTM A 134-96. Standard Specifica	-

tion for Pipe, Steel, Electric-Fusion (Arc)-Welded (Sizes NPS 16 and Over)56.60-1
ASTM A 135-97c, Standard Specifica-

ASTM A 135-97c, Standard Specification for Electric-Resistance-Welded Steel Pipe......56.60-1
ASTM A 139-96, Standard Specifica-

ASTM A 139-96, Standard Specification for Electric-Fusion (Arc)-Welded Steel Pipe (NPS 4 and Over)......56.60-1

ASTM A 179/A 179M-90a (1996), Standard Specification for Seamless Cold-Drawn Low-Carbon Steel Heat-Exchanger and Condenser Tubes56.60-1

ASTM A 182/A 182M-97c, Standard Specification for Forged or Rolled Alloy-Steel Pipe Flanges, Forged Fittings, and Valves and Parts for High-Temperature Service56.50-105

ASTM A 192/A 192M-91 (1996), Standard Specification for Seamless Carbon Steel Boiler Tubes for High-Pres-

ASTM A 197-87 (1992), Standard Specification for Cupola Malleable Iron

AS1M A 214/A 214M-96, Standard Specification for Electric-Resistance-Welded Carbon Steel Heat-Exchanger and Condenser Tubes.......56.60-1

perature Service56.60-1 ASTM A 249/A 249M-96a, Standard Specification for Welded Austenitic Steel Boiler, Superheater, Heat-Exchanger, and Condenser

ASTM A 320/A 320M-97, Standard Specification for Alloy/Steel Bolting
Materials for Low-Temperature
Service.......56.50-105

ASTM A 334/A 334M-96, Standard Specification for Seamless and Welded Carbon and Alloy-Steel Tubes for Low-Temperature Service56, 50-105;

ASTM A 335/A 335M-95a, Standard Specification for Seamless Ferritic Alloy-Steel Pipe for High-

ASTM A 352/A 352M-93 (1998), Standard Specification for Steel Castings, Ferritic and Martensitic, for Pressure-Containing Parts, Suitable

ASTM A 369/A 369M-92, Standard Specification for Carbon and Ferritic Alloy Steel Forged and Bored Pipe for High-Temperature Service56.60-1

ASTM A 376/A 376M-96, Standard Specification for Seamless Austenitic Steel Pipe for High-Temperature Central-Station Service ... 56.07-10; 56.60-1;

ASTM A 395/A 395M-98, Standard Specification for Ferritic Ductile Iron

172

Pressure-Retaining Castings for	tion for Copper and Copper-Alloy
Use at Elevated Temperatures56.50-60;	Seamless Condenser Tubes and
56.60-1; 56.60-15	Ferrule Stock56.60-1
ASTM A 403/A 403M-98, Standard Spec-	ASTM B 124–96, Standard Specifica-
ification for Wrought Austenitic	tion for Copper and Copper Alloy
Stainless Steel Piping Fittings56.60-1	Forging Rod, Bar, and Shapes56.60-2
ASTM A 420/A 420M-96a, Standard	ASTM B 161-93, Standard Specifica-
Specification for Piping Fittings	tion for Nickel Seamless Pipe and
of Wrought Carbon Steel and Alloy	Tube56.60-1
Steel for Low-Temperature Serv-	ASTM B 165-93, Standard Specifica-
ice56.50-105; 56.60-1 ASTM A 520-97, Standard Specifica-	tion of Nickel-Copper Alloy (UNS
tion for Supplementary Require-	NO4400) Seamless Pipe and Tube
ments for Seamless and Electric-	
Resistance-Welded Carbon Steel	ASTM B 167-97a, Standard Specifica-
Tubular Products for High-Tem-	tion for Nickel-Chromium-Iron Al-
perature Service Conforming to	loys (UNS NO6600, NO6601, NO6603,
ISO Recommendations for Boiler	NO6690, NO6025, and NO6045) Seam- less Pipe and Tube56.60–1
Construction56.60-1	ASTM B 171-95, Standard Specifica-
ASTM A 522/A 522M-95b, Standard	tion for Copper-Alloy Plate and
Specification for Forged or Rolled	Sheet for Pressure Vessels, Con-
8 and 9% Nickel Alloy Steel	densers, and Heat Exchangers56.60-2
Flanges, Fittings, Valves, and	ASTM B 210-95, Standard Specifica-
Parts for Low-Temperature Serv-	tion for Aluminum and Alu-
ice	minum-Alloy Drawn Seamless
ASTM A 536-84 (1993), Standard Speci- fication for Ductile Iron Castings	Tubes56.60-1
56.60-1	ASTM B 234-95, Standard Specifica-
ASTM A 575-96, Standard Specifica-	tion for Aluminum and Alu-
tion for Steel Bars, Carbon, Mer-	minum-Alloy Drawn Seamless
chant Quality, M-Grades56.60-2	Tubes for Condensers and Heat Ex-
ASTM A 576-90b (1995), Standard Spec-	changers
ification for Steel Bars, Carbon,	ASTM B 241/B 241M-96, Standard Spec-
Hot-Wrought, Special Quality56.60-2	ification for Aluminum and Alu- minum-Alloy Seamless Pipe and
ASTM B 16-92, Standard Specification	Seamless Extruded Tube56.60-1
for Free-Cutting Brass Rod, Bar,	ASTM B 280-97, Standard Specifica-
and Shapes for Use in Screw Ma-	tion for Seamless Copper Tube for
chines	Air Conditioning and Refrigera-
ASTM B 21–96, Standard Specification for Naval Brass Rod, Bar, and	tion Field Service56.60-1
Shapes56.60-2	ASTM B 283-96, Standard Specifica-
ASTM B 26/B 26M-97, Standard Speci-	tion for Copper and Copper-Alloy
fication for Aluminum-Alloy Sand	Die Forgings (Hot-Pressed)56.60–2
Castings	ASTM B 315-93, Standard Specifica-
ASTM B 42-96, Standard Specification	tion for Seamless Copper Alloy
for Seamless Copper Pipe, Stand-	Pipe and Tube56.60-1
ard Sizes56.60-1	ASTM B 361-95, Standard Specifica-
ASTM B 43-96, Standard Specification	tion for Factory-Made Wrought
for Seamless Red Brass Pipe,	Aluminum and Aluminum-Alloy
Standard Sizes56.60-1	Welding Fittings56.60-1 ASTM B 858M-95, Standard Test Meth-
ASTM B 68–95, Standard Specification	od for Determination of Suscepti-
for Seamless Copper Tube, Bright	bility to Stress Corrosion Crack-
Annealed56.60-1 ASTM B 75-97, Standard Specification	ing in Copper Alloys Using an Am-
for Seamless Copper Tube56.60-1	monia Vapor Test56.60-2
ASTM B 85-96, Standard Specification	ASTM D 635-97, Standard Test Method
for Aluminum-Alloy Die Castings	for Rate of Burning and/or Extent
56.60-2	and Time of Burning of Plastics in
ASTM B 88-96, Standard Specification	a Horizontal Position56.60-25
for Seamless Copper Water Tube	ASTM D 1785-96b, Standard Specifica-
56.60–1	tion for Poly (Vinyl Chlo-
ASTM B 96-93, Standard Specification	ride)(PVC) Plastic Pipe, Schedules
for Copper-Silicon Alloy Plate,	40, 80, and 12056.60-25
Sheet, Strip, and Rolled Bar for	ASTM D 2241-96b, Standard Specifica-
General Purposes and Pressure	tion for Poly (Vinyl Chlo-
Vessels	ride)(PVC) Pressure-Rated Pipe

46 CFR Ch. I (10-1-03 Edition)

	·
ASTM D 2464-96a, Standard Specification for Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings Schedule 80	tings in Piping Applications above 0 Degrees F
Marine Applications56.60-1 ASTM F 1120-87 (1993), Standard Speci-	MANUFACTURERS STANDARDIZATION SOCIETY OF THE VALVE AND FITTINGS INDUSTRY, INC.
fication for Circular Metallic Bellows Type Expansion Joints for	(MSS) 127 Park Street NE, Vienna, VA 22180
Piping Applications	SP-6-85 Standard Finishes for Contact Faces of Pipe Flanges and Con-
ASTM F 1139-88 (1993), Standard Speci- fication for Steam Traps and Drains56.60-2	necting-End Flanges of Valves and Fittings
ASTM F 1172-88 (1993), Standard Specification for Fuel Oil Meters of the Volumetric Positive Displacement Type56.60-1	SP-25-88 Standard Marking System for Valves, Fittings, Flanges and Unions56.15-1; 56.20-5; 56.60-1 SP-44-85 Steel Pipe Line Flanges56.60-1
ASTM F 1173-95, Standard Specifica- tion for Thermosetting Resin Fi- berglass Pipe and Fittings to be	SP-45-87 Bypass and Drain Connection Standard56.20-20; 56.60-1 SP-51-86 Class 150LW Corrosion Re-
Used for Marine Applications56.60-1 ASTM F 1199-88 (1993), Standard Specification for Cast (All Temperature and Pressures) and Welded Pipe Line Strainers (150 psig and 150 Degrees F Maximum)	sistant Cast Flanges and Flanged Fittings

§ 56.01-2

Materials, Design and Manufac-
ture56.60-1
SP-61-85 Pressure Testing of Steel
Valves56.60-1
SP-67-83 Butterfly Valves56.60-1
SP-69-83 Pipe Hangers and Supports—
Selection and Application56.60-1
SP-72-87 Ball Valves with Flanged or
Butt-Welding Ends for General
Service56.60-1
SP-73-86 Brazing Joints for Wrought
and Cast Copper Alloy Solder
Joint Pressure Fittings56.60-1
SP-83-87 Steel Pipe Unions, Socket-
Welding and Threaded56.60-1

SOCIETY OF AUTOMOTIVE ENGINEERS (SAE)

400 Commonwealth Drive, Warrendale, Pa 15096

[CGD 77-140, 54 FR 40599, Oct. 2, 1989; 55 FR 39968, Oct. 1, 1990, as amended by CGD 88-032, 56 FR 35822, July 29, 1991; CGD 95-012, 60 FR 48049, Sept. 18, 1995; CGD 95-027, 61 FR 26000, May 23, 1996; CGD 96-041, 61 FR 50728, Sept. 27, 1996; CGD 97-057, 62 FR 51044, Sept. 30, 1997; CGD 95-028, 62 FR 51200, Sept. 30, 1997; USCG-1999-6216, 64 FR 53224, Oct. 1, 1999; USCG-1999-5151, 64 FR 67178, Dec. 1, 1999]

§ 56.01-3 Power boiler external piping (Replaces 100.1.1, 100.1.2, 111.6, 122.1, 132 and 133).

- (a) Power boiler external piping and components must meet the requirements of this part and §§ 52.01–105, 52.01–110, 52.01–120 of this chapter.
- (b) Specific requirements for power boiler external piping and appurtenances, as defined in §§100.1.1 and 100.1.2, appearing in the various paragraphs of ANSI B31.1, are not adopted unless specifically indicated elsewhere in this part.

[CGD 77-140, 54 FR 40602, Oct. 2, 1989; 55 FR 39968, Oct. 1, 1990]

§ 56.01-5 Adoption of ANSI (American National Standards Institute) Code B31.1 for pressure and power piping, and other standards.

(a) Piping systems for ships and barges shall be designed, constructed, and inspected in accordance with B31.1, the "Code for Pressure Piping, Power Piping," of the ANSI (American National Standards Institute), as limited, modified, or replaced by specific re-

quirements in this part. The provisions in the appendices to ANSI-B31.1 are adopted and shall be followed when the requirements in ANSI-B31.1 or the regulations in this part make them mandatory. For general information Table 56.01-5(a) lists the various paragraphs, etc., in ANSI-B31.1 which are limited, modified, replaced, or reproduced by regulations in this part.

TABLE 56.01–5(A)—LIMITATIONS AND MODIFICA-TIONS IN THE ADOPTION OF ANSI–B31.1 CODE FOR PRESSURE AND POWER PIPING

Section or paragraph in ANSI– B31.1, and disposition	Unit in this part
100.1 replaced by	56.01–1.
100.2 modified by	56.07–5.
101 through 104.7 modified by	56.07-10.
101.2 modified by	56.07-10(a), (b).
101.5 replaced by	56.07-10(c).
102.2 modified by	56.07-10(d).
102.2.5(d) replaced by	56.50-40.
102.3 and 104.1.2 modified by	56.07-10(e).
104.3 modified by	56.07-10(f).
104.4 modified by	56.07-10(e).
104.5.1 modified by	56.30–10.
105 through 108 replaced by	56.10–1 through 56.25– 20.
110 through 118 replaced by	56.30–1 through 56.30– 35.
119.5.1 replaced by	56.35–10, 56.35–15, 56.35–35.
119.7 replaced by	56.35–1.
122.3 modified by	56.50–97.
122.6 through 122.10 replaced by	56.50–1 through 56.50– 80.
123 replaced by	56.60-1.
Table 126.1 is replaced by	56.30-5(c)(3), 56.60-1.
127 through 135.4 replaced by	56.65-1, 56.70-1
	through 56.90-10.
136 replaced by	56.95–1 through 56.95–
137 replaced by	10. 56.97–1 through 56.97–
	40.

- (b) When a section or paragraph of the regulations in this part relates to material in ANSI-B31.1 Code (American National Standard Code for Pressure Piping, Power Piping), the relationship with this code will be shown immediately following the heading of the section or at the beginning of the paragraph as follows:
- (2) (Replaces ______.) This indicates that the material in the ANSI-B31.1 so numbered for identification does not apply.